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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,955	11/30/2000	Marcel Bourrier	N1239	8639

32905 7590 04/22/2003

JONDLE & ASSOCIATES P.C.
9085 EAST MINERAL CIRCLE
SUITE 200
CENTENNIAL, CO 80112

EXAMINER

IBRAHIM, MEDINA AHMED

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 04/22/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/725,955

Applicant(s)
BOURRIER

Examiner
Medina Ibrahim

Art Unit
1638



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 10, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 36-48 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11 and 38-47 is/are allowed.
- 6) ☒ Claim(s) 36, 37, and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Applicants' response filed 02/10/03 in reply to the Office action mailed 09/10/02 and amendment B have been entered. Claims 12-19, 23, 25-28, 31-34 have been cancelled. New claims 36-48 have been added. Therefore, claims 1-11 and 36-48 are pending and are under examination.

All previous rejections and objections not stated below have been withdrawn.

Claim Rejections - 35 USC § 112, Enablement

Claim 48 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This rejection is repeated for the same reasons as set forth in the Office action mailed 9/10/02, for cancelled claims 31 and 33. Applicant's arguments as set forth in the response filed 2/10/03 have been considered but are not persuasive.

Applicant argues that a plant breeder can make the claimed corn plant of the inbred MNI1 further comprising a single gene conversion, where the gene confers specific characteristics because the introgression of a single gene into the genetic background of a different plant via backcrossing is routine in the art. Applicant cites Hallauer et al (1988) reference to support his position. Applicant further argues that the method counted, in 1981 for 17% of the total breeding efforts to develop inbred

lines. Therefore, Applicant asserts, an ordinary plant breeder can readily use the inbred corn plant of the MNI1 inbred line to make an MNI1 corn plant further comprising a single conversion via backcrossing methods (page 10 of the response, last full paragraph).

Applicant's arguments have been fully considered but are not deemed persuasive for the following reasons: 1) while there is no question that backcrossing method is a powerful tool in the development of homozygous variety and inbred lines of outcrossing species with superior characteristics but deficient in one or few specific characteristics, there is no evidence from the prior art that a single gene trait can be transferred from an elite corn plant into an inbred corn line by backcrossing without disrupting the desired unique morphological and physiological characteristics of the inbred. 2) Applicant has neither provided a publication/ prior art where a single gene trait has been successfully transferred into a plant without disrupting the other characteristics or genotype of the plant nor has demonstrated via working examples that a single gene trait can be transferred from genetic background of an elite into the inbred line MNI1 while retaining the unique genotypic and phenotypic characteristics of the inbred. Therefore, the Examiner maintains that the claimed corn plant of the inbred MNI1 further comprising a single gene conversion, where the gene confers specific characteristics, is not enabled. The rejection is maintained.

Written Description

Claims 36-37 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The rejection is repeated for the same reasons as set forth in the last Office action mailed 09/10/02, for cancelled claims 12-13 and 16-17. Applicant's response filed 2/10/03 has been considered but are not deemed persuasive.

Applicant's arguments are basically the following: due to the homozygous state of inbred parental lines, the cross between two different inbred parental lines will result in F1 hybrid which will contain fifty percent of the genome of each inbred parental line. And since a genotype is expressed through a phenotype, both the phenotypic and genotypic characteristics of F1 hybrid are predictable. Applicant states that as long as the homozygosity of the parental lines is maintained, the resulting hybrid cross will be stable (pages 6-9 of the response).

Examiner responds that the rejected claims are not drawn to inbred corn lines that are self pollinated or F1 hybrid produced from the cross of two known inbred parental lines. The rejected claims are directed to a F1 hybrid plant wherein fifty percent of its genetic material is from the plant of the inbred line MNI1, and the other fifty percent of its genetic material is from an unknown corn plant. There is no genotypic or phenotypic description of the second half of the genetic material of the claimed F1 hybrid plants. In addition, since each parent line contributes a set of alleles and these

two sets of alleles interact in a variety of ways (influenced by the environment) to determine the phenotype of the progeny, one cannot predict how the genes of the known parent MNI1 will affect the phenotype of the F1 hybrid. It is not known how the known (fifty percent) genotype would react with the environment or with other genes in the genome. The specification, page 3, lines 6-16, discusses the complexity of inheritance and states " (t)he inbred lines which are developed are unpredictable. This unpredictability is because the breeder's selection occurs in unique environments, with no control at the DNA level (using conventional breeding procedures)..... A breeder of ordinary skill in the art cannot predict the final resulting lines he develops." Therefore, it is likely that F1 hybrids produced from each cross with MNI1 may be genetically distinct. Therefore, the F1 hybrid seeds of claims 36-37 are not adequately described.

Remarks

Claims 1-11 and 38-47 are allowable.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period; then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Papers relating to this application may be submitted to Technology Sector 1 by facsimile transmission. Papers should be faxed to Crystal Mall 1, Art Unit 1638, using fax number (703) 308-4242. All Technology Sector 1 fax machines are available to receive transmissions 24 hrs/day, 7 days/wk. Please note that the faxing of such papers must conform with the Notice published in the Official Gazette, 1096 OG 30, (November 15, 1989).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is (703) 306-5822. The Examiner can normally be reached Monday -Tuesday from 8:00 AM to 5:00 PM and Wednesday-Thursday from 9:00AM to 3:00PM

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0196.

April 15, 2003

mai



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